

**Patient and Methods** The patient had commenced peritoneal dialysis 14 months prior to transplant due to end-stage renal failure. Following transplant workup her father was deemed a suitable donor and a right sided hand assisted laparoscopic donor nephrectomy was performed. The recipient then underwent the transplant with a midline incision to allow access to the aorta and inferior vena cava to which the anastomoses were made. Anatomical reversal of the usual techniques used in paediatric transplantation were needed due to situs inversus. The kidney was then placed in the left iliac fossa. Native kidneys not removed and the abdomen was closed with peritoneal dialysis catheter removed at time of transplant.

**Results** The patient recovered in the paediatric intensive care unit as per standard transplantation at the unit. Ultrasound imaging was performed immediately post operatively and showed good global perfusion of the kidney with no hydronephrosis or perinephric collection. The patient developed immediate graft function and was discharged with standardised outpatient follow up.

**Discussion** Six cases of BBS and renal transplantation have been reported in literature and this is the first case report of a successful renal transplantation in a child with both BBS and situs inversus totalis. We therefore conclude that such anatomical malformations should not be considered a contra-indication for renal transplantation in children.

## Paediatric Mental Health Association

### G70 FOREIGN ACCENT SYNDROME (FAS) IN ASSOCIATION WITH AUTISTIC SPECTRUM DISORDER (ASD). A NEW SYNDROME?

doi:10.1136/archdischild-2013-304107.082

S Rambathla, V Rao. *Paediatrics, Walsall NHS Healthcare Trust, Walsall, UK*

**Background** FAS has been described in adults following acute injury to the brain. Children commonly develop an accent closer to that of their peers than their parents' native accent. Children with ASD often have a speech and language disorder. There have been no recorded cases of children speaking with a foreign accent that they have not been exposed to.

We present 3 British children with Asperger's syndrome who speak with an American sounding accent with no prior exposure to it. We will show DVD clips of their speech.

#### Case 1:

White English girl, 8, with unilateral hearing loss following congenital CMV infection. Attending main stream school with a statement of special educational needs (SEN), but with significant social and communication difficulties; diagnosed as Asperger's syndrome. Fluent speech with a strong American accent.

#### Case 2:

White English boy, 9, with CHARGE syndrome, attending main stream school with a statement of SEN; good speech, but with poor social interaction skills and significant obsessional behaviour; was diagnosed as Asperger's syndrome. Speaks with a clear American accent.

#### Case 3:

Black British boy, 6 with behavioural difficulties, in main stream school with significant social and communication difficulties; diagnosed with Asperger's syndrome. Has clear speech with an American accent.

**Discussion** There are over 90 cases reported from many parts of the world in adults who have suddenly developed a foreign accent following trauma to the brain such as stroke, waking up after anaesthesia, migraine, brain tumour. It is thought to be due to involvement of speech area of brain.

There has been no report of a child with FAS.

None of our children have had any documented acute brain trauma but 2 of them have some co-morbidities. Their unexplained foreign accents have baffled both parents and professionals alike.

**Conclusions** We hypothesise some children with ASD could have had a brain injury of an obscure nature leading to both the behavioural difficulties and pronunciation disorder that sounds like a foreign accent. We suggest that the combination of ASD and FAS is a new syndrome.

## Paediatricians with Expertise in Cardiology/ British Inherited Metabolic Disease Group

### G71 A REVIEW OF 24-HOUR AMBULATORY HOLTER ELECTROCARDIOGRAPHY

doi:10.1136/archdischild-2013-304107.083

G Spentzou, W Kelsall. *Paediatrics, Cambridge University Hospital, Cambridge, UK*

**Background** The 24-hour ECG is being widely used by paediatricians and paediatric cardiologists to assess children who present with palpitations or other cardiac symptoms. It is also used for children who are known to have an arrhythmia or a cardiac condition, have a family history of serious arrhythmia or suffer from a metabolic disease which can affect their heart.

**Aims** To review the effectiveness of 24-hour ECG in capturing arrhythmias in children.

**Methods** This was a retrospective review of the 24-hour ECG reports between January 2009 and January 2012. The patients were identified from the cardiology database and the reports were accessed via the electronic medical record system of our hospital.

**Results** Over this 3 year period, 178 Holter ECGs were performed. That included 72 female and 106 male patients. The age range was from 4 days to 16 years, with most Holters performed between 1 month to 2 years of age (27%). Most patients (90%) had an ambulatory ECG which lasted for 24 hours, while on 9 occasions it lasted for 48 hours and on 8 occasions for 72 hours. The indications for requesting this investigation were divided into 5 categories: known arrhythmia, known cardiac disease, non-specific palpitations (including chest pain, shortness of breath and 'funny turns'), family history of prolonged QTc and SUDS and screening due to metabolic disease (Fabry's). 34 patients (19%) were on medication at the time of the Holter ECG, one had an implanted defibrillator and another one had a pacemaker. In total, significant abnormalities were found in 29 (16%) patients, including SVT, second degree heart block and frequent sinus pauses. Quite importantly, abnormalities were not detected amongst the patients who were being investigated for non-specific palpitations. Of note, 10 such patients experienced symptoms during their 24-hour ECG study; in all cases the recorded rhythm was sinus rhythm.

**Conclusion** In this study, the 24 hour ECG did not reveal any rhythm abnormalities in the patients being investigated for non-specific palpitations and other associated symptoms. However, it demonstrated important abnormalities in patients under follow-up for known arrhythmia, heart disease or relevant family history.

### G72 THE EVOLVING ROLE OF A PAEDIATRICIAN WITH EXPERTISE IN CARDIOLOGY IN A NON-CARDIAC CENTRE

doi:10.1136/archdischild-2013-304107.084

<sup>1</sup>S Sivananthan, <sup>2</sup>R Yates, <sup>1</sup>W Kelsall. <sup>1</sup>Department of Paediatrics, Addenbrooke's Hospital, Cambridge University Hospitals NHS Foundation Trust, Cambridge, UK; <sup>2</sup>Department of Paediatric Cardiology, Hospital for Sick Children Great Ormond Street, London, UK

**Aim** The Safe and Sustainable Review of Paediatric Cardiac Surgery will change the way that paediatric cardiology is delivered in the United Kingdom<sup>1</sup>. Paediatricians working with cardiologists in

networks have key roles to play in providing high quality care<sup>2</sup>. This study reviews the development of local services provided by a paediatrician with expertise in cardiology (PEC).

**Methods** A retrospective review of paediatric cardiology outpatient activity over an 18-year period (1994–2012) was performed. Clinic numbers and patient attendance data were obtained from the hospital outpatient databases for three clinics: PEC clinic, specialist outreach clinic (SOC) and transition clinic (TC) for patients transferring to adult services.

**Results** There has been a substantial increase in outpatient activity over the last 18 years with a 93% increase in the total number of patient episodes. The increased activity (Figure 1) has mainly occurred in the PEC clinic with up to 70 PEC clinics annually. The SOC clinic has changed from a monthly clinic to a fortnightly afternoon clinic with a separate morning foetal echocardiography clinic.

The total number of patients seen has increased in parallel with the number of clinics. The 97% increase in new patients shows that increased patient load is not because existing patients are being seen more regularly, but new patients are being added at a consistent rate (Figure 2). The largest increase in new patients seen is in the PEC clinic with almost 65% of the patients being first attenders. Patients with significant heart disease are then seen in the SOC and TC where over 90% of patients are under long-term follow-up.

**Conclusion** This work clearly demonstrates the extent of expansion of local paediatric cardiology services provided by a PEC and specialist cardiologist over the last 18 years. PECs are ideally placed to deliver a cardiology service at secondary care level and work alongside tertiary centres to optimise workload. A PEC working in “network” can provide the type of care envisaged in the Safe and Sustainable review without overwhelming paediatric cardiologists.

## REFERENCES

1. The future of children's heart services: [www.specialisedservices.nhs.uk/safe\\_sustainable/childrens-congenital-cardiac-services](http://www.specialisedservices.nhs.uk/safe_sustainable/childrens-congenital-cardiac-services) (Accessed January 2013)
2. Quereshi SA. [www.bcs.com/documents/ZBF\\_Outreach\\_clinic\\_Paediatric\\_Cardiology\\_Service\\_BCCA\\_document\\_Oct\\_2009](http://www.bcs.com/documents/ZBF_Outreach_clinic_Paediatric_Cardiology_Service_BCCA_document_Oct_2009) (Accessed January 2013)

G73

## OUTCOMES OF CHILDREN REFERRED BY GENERAL PRACTITIONERS TO PAEDIATRIC CARDIOLOGY CLINICS

doi:10.1136/archdischild-2013-304107.085

<sup>1</sup>A Khushu, <sup>2</sup>AW Kelsall, <sup>3</sup>J Usher-Smith. <sup>1</sup>School of Clinical Medicine, University of Cambridge, Cambridge, UK; <sup>2</sup>NICU, Cambridge University Hospitals NHS Foundation Trust, Cambridge, UK; <sup>3</sup>The Primary Care Unit, Strangeways Research Laboratory, University of Cambridge, Cambridge, UK

**Aims** Children are referred to paediatric secondary care by general practitioners (GPs) for numerous reasons. Cardiac complaints such as heart murmurs are common, and children with murmurs are referred for assessment which may include echocardiography. Given the increasing pressure to reduce referrals across all specialties, this study reviewed outcomes of GP referrals to a paediatrician with expertise in cardiology (PEC) to evaluate the use of echocardiography and provide guidance for GPs.

**Methods** We retrospectively reviewed electronic hospital records of children under 16 years old newly referred by NHS GPs to a local PEC clinic during 2011. We excluded children previously seen by any cardiology service.

**Results** Two hundred and seventy one children were referred, 165 (60%) were referred for investigation of a murmur: 137 for an asymptomatic murmur alone and 28 for a murmur plus either symptoms or family history of cardiac disease. All underwent echocardiography. 31 (19%) were diagnosed with congenital heart

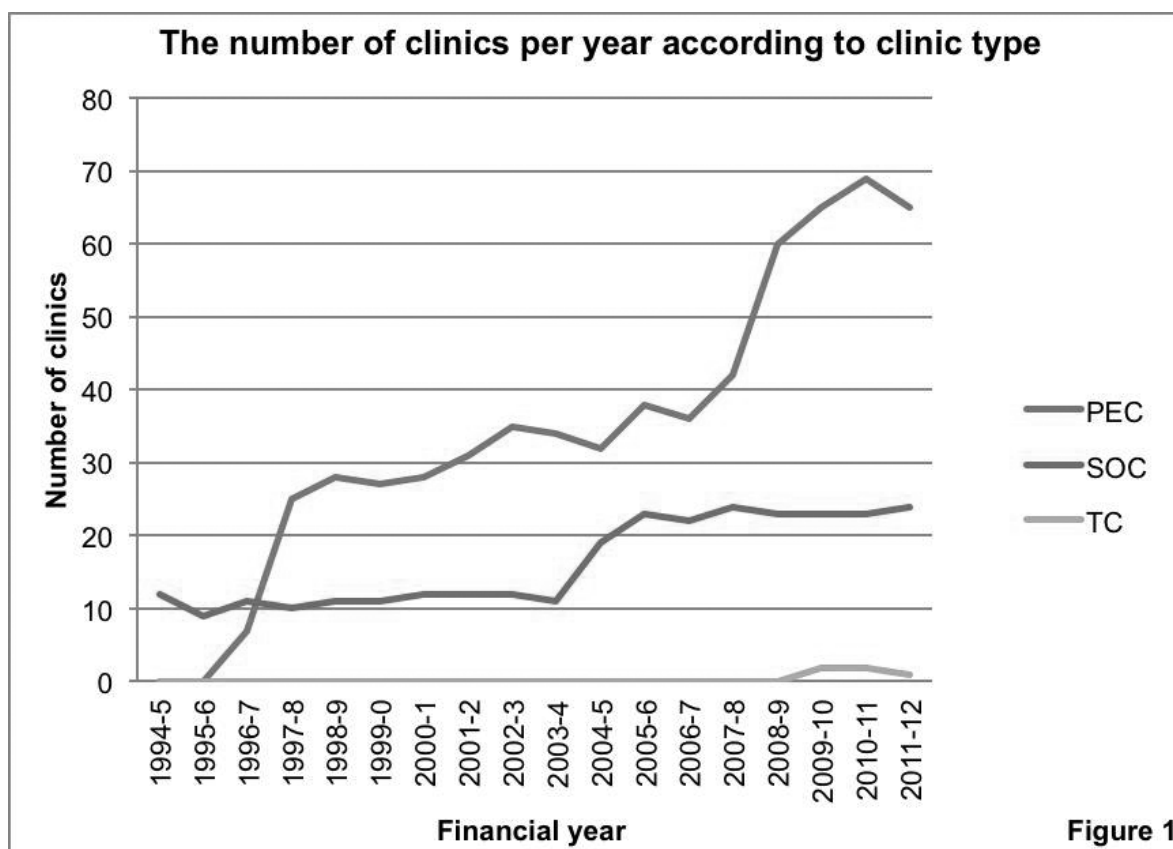


Figure 1